INSERT 2

Many gardening cutting blades, stringed devices, and horizontally rotating disks and bars have been patented for over 90 years; some are wheel mounted; some are hand-held; most are just patented concepts that have not been built nor marketed because they are not economically feasible. Further, most of these patented gardening devices have been anticipated by some former inventor and yet they received a patent; for example, U.S. Patent #2,654,159 issued Sept 8, 1953 to J. G. Rountree, SR, a horizontally rotating disk type lawn mower, which was clearly anticipated by U.S. Patent #3,080,697 issued Mar 12, 1953 to D. A. Mauro; U.S. Patent #2,745,331 issued May 15, 1956 to L. Lancour, for a horizontally rotating disk type cutter; U.S. Patent #4,501,332 issued Feb 26, 1985 to Robert O. Straayer, is a horizontally rotating disk type garden tool; U.S. Patent #5,056,605 issued Oct 15, 1991 to Bond, et al, is a horizontally rotating disk type cutting tool. Bond's cutting tool is very dangerous to the operator and all surrounding good or usable vegetation. The blades are sharp and protrude beyond the edge of the disk and cannot weed or till in close to plants. Fig. 1, member 42, in Bond's Patent is a cutting blade set generally at a 90-degree angle to the disk with another 90-degree angle partway down the blade such that a sharp edge of the blade extends outward and parallel to the disk. The present invention is an improvement and far superior to Bond's cutting tool. Even after 14 years, Bond's cutting tool is still not on the market. None of the referenced Patents nor others individually or collectively teach or make obvious the economical one-step manufacturing process nor do they employ the floating disk concept for shallow cultivating up close to the plants as taught by the present invention.

INSERT 3

The present invention is a horizontally rotating disk for garden weeding and cultivating. The said disk may be attached to various power-driven implements. Said disk is superior to all previously patented gardening disks, in that the design of said disk allows it to float on top of the soil, not having a tendency to dig in as do the other bladed disks and bars. Said disk has the lugs inset 1/2-inch from the edge thereby allowing said disk to weed close to plants.

One of the great advantages of the present invention is its simple design, whereby, it can be stamped out as a complete tool in a one-step manufacturing process, making it very economical to produce and market. Of the many horizontally rotating disk or blade devices that have been patented and issued to date, none of these are available to the general public, as the cost of manufacturing these various complicated devices is prohibitive.

INSERT 4

18. A design improvement to all horizontally rotating steel cultivating disks with protruding lugs or blades, said improved design consists of a thin steel disk with one or more protruding unsharpened lugs and a centrally located mounting means; whereby, said disk, said lugs, and mounting means are of integral one-piece stamped construction, with said lugs spaced near and evenly along the outer circumference of said disk, said lugs are bent at right angles to the rotating plane of said disk and protrude 1 inch from one side of said disk, said lugs are 3/4-inch wide and are located with said bend of each lug 1/2 inch inward from the outer edge of said disk and said bend is positioned perpendicular to the radius through the center of said lug; thereby, leaving a 1/2-inch wide margin between said lugs and said outer edge of the circumference of said disk.